

INHERITANCE OF LEFT HANDEDNESS

Jordan (Am. Breeders' Mag. 1911) reports studies of left-handedness of nearly 3000 individuals belonging to 78 lines of descent. The evidences are that left-handedness is inherited, but apparently not in accordance with the Mendelian principles. He believes that left-handedness is correlated with greater size and weight of the right hemisphere of the brain.

EFFECTS OF DARKNESS ON GOLDFISH

Ogneff (Anat. Anzeig., 1911) describes changes in gold fish which have been kept three years or more in darkness. The principle points noted are:

1. The golden appearance gives place to darker color, due histologically to the development and spreading of black chromatophores which cover the crystals that give the normal shimmer.
2. The ovaries become more compact and degenerative changes set in.
3. The eye undergoes a distinct series of degenerative changes. All the cells become smaller; the layer of rods and cones disappears altogether; the pigment processes that normally penetrate between the rods and cones fail. Functionally, these changes result in blindness,—all within the life of the single individual.

A NEW ULTRA CONDENSER FOR VIEWING ULTRA-MICROSCOPIC PARTICLES

The Ultra Condenser has been devised by Dr. Felix Jentsch*, of the scientific department of E. Leitz, Wetzlar and serves for ultra-microscopic observations, especially for the examination of gases and fluids. It is not available for the examination of solids.

The designation *Ultra Condenser* signifies that the apparatus is an appendage which renders an ordinary microscope available for ultra-microscopic observations.

*Physikalische Zeitschrift, Vol. 11, pp. 1000-1001 Verhandlungen der deutschen Physikalischen Gesellschaft, Vol. 12, pp. 991-993, 1910. Paper read on the 22nd Sept., 1910, before the German Congress of Science and Medicine at Koenigsberg.

Whereas in all previously devised methods the illuminating pencil enters from one side only, this condenser causes the light to converge to one point from all sides. This is achieved by means of two glass bodies having each a reflecting spherical surface, as shown

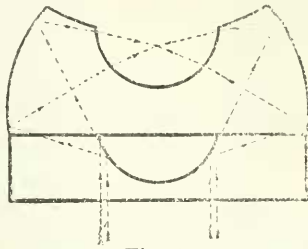


Fig. 1

in Fig. 1. It will be seen that every ray is reflected four times, twice before the particle becomes a centre of disturbance and twice after this occurrence. In this way the whole of the rays, with the exception of a very small portion, leave the ultra-condenser on the same

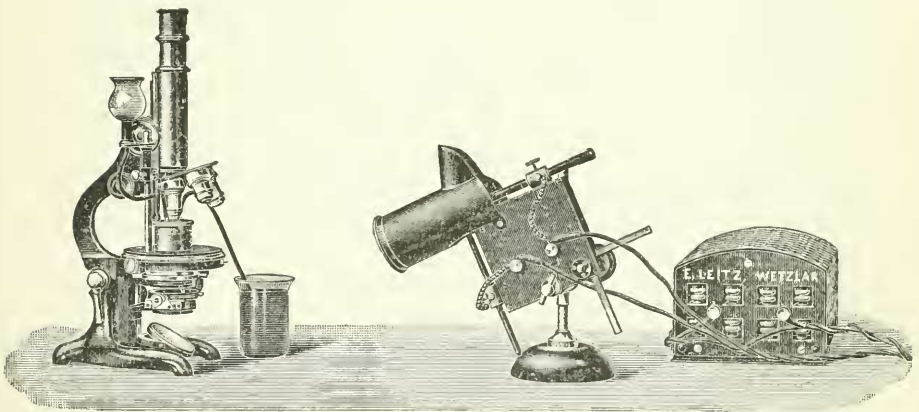


Fig. 2

side on which they entered it. The point of convergence is surrounded by a hollow sphere which is ground out of the upper body of glass and which is provided for the accommodation of the gases, vapours, or liquids which are to be examined.

The whole is firmly cemented into a metal box fitted with a bayonet jointed and rubber faced cover, by means of which the hollow can be closed tightly. Gases and liquids may be led in through two small tubes. The centre of the cover is fitted with a small disc of quartz, which serves as an observation window. It goes without saying that there is no occasion to introduce an immersion fluid of any kind.

Figure 2 demonstrates the position of the Condenser when used in connection with the microscope.

HONORARY DEGREE TO MR. E. LEITZ, JR.

The University of Giessen has conferred on Mr. E. Leitz, Jr., director of the microscopic concern, Ernst Leitz, Wetzlar, Germany, the honorary degree of doctor of medicine. The title in the certificate reads:

"Dem zielbewussten Leiter der Weltfirma Leitz und weitblickenden Organisator auf sozialem Gebiet, dem talentvollen Foerderer der Mikroskopie, Mikro-photographie und Projektion, dem Schoepfer neuer Instrumente und Konstruktionen, der durch seine reichen Zuwendungen von optischen Apparaten die Weissenschaftlichen Institute in hohem Masse unterstuetzte, ausbauen und befruchten half, fuer seine Verdienste um die Universitaet."

METALLURGICAL APPARATUS

C. Reichert, Vienna, emphasizes the importance of Metallography by the issuance of a special catalog descriptive of his older and more recent apparatus for microscopic analysis of metals.

Formerly such work was confined largely to the laboratory of the research chemist or metallurgist, but since it is coming to be appreciated that microscopic examination is one of the most efficient means of determining the soundness and uniformity of metals, these instruments are a necessary part of the equipment of contractors, engineers, as well as of the manufacturers of the metal and those who manufacture special products from the metal.

In addition to the older models originated by Prof. Rejto and the auxiliary appliances used with these, the body of the catalog is given to the discussion of the principles of a new metallographic